## ALTERNATIVE C-1 - GRAZING USE (APPLICANT'S PROPOSAL)

OBJECTIVES:

Mitigate the effects of mining disturbance on the leased lands.

Mitigate safety and health hazards.

Protect the environment with particular concern for the water resources.

Enhance the visual resources of the area.



FUTURE LAND USES:

Livestock grazing.

Specifically excluded are habitation, farming, and construction of commercial or industrial facilities.

RECLAMATION MEASURES:

OPEN PITS:

Backfill to three feet above the groundwater recovery level (as determined by Anaconda).

Backfill, with protore, waste dumps H and J, and excess material obtained from the sloping of waste piles.

Cover the backfill material with four feet of non-hazardous waste, and one foot of topsoil.

Buttress the west side of the Gavilon Mesa highwall (the top of the highwall may be cut back by blasting).

Fence the north, west, and south sides of the North and South Paguate Pits with six-foot chainlink.

Scale all other highwalls.

PROTORE STOCKPILES:

Use all protore as backfull material.

WASTE PILES:

Relocate dumps H and J to the open pits as backfill material.

Cover dumps that contain hazardous material on their outer surface with four feet of non-hazardous material and one foot of topsoil.

Cover dumps that do not contain hazardous material on their outer surface with one foot of topsoil.

Leave previously topsoiled and revegetated dumps undisturbed (except to reseed, as necessary).

Reduce the angle of some dump slopes. The approximate average grade would be 2.25 to 1 with terraces and rock-lined drop structures to drain surface runoff off the piles.

SITE STABILITY AND DRAINAGE:

Remove all waste that lies within 200 feet of the Rio Moquino and Rio Paguate.

Armor arroyo headcuts that have the potential for encroaching upon waste dumps.

Construct a series of micro-basis within each open pit (approximately three per pit).

Construct erosion control berms on the perimeter of all waste piles. Construct a series of erosion control berms on the top of all waste piles to hold surface runoff.

Remove waste dump J, and protore stockpiles 17-BC and 6-B to unblock the ephemeral drainage on the south side of the mine. The two blocked drainages on the north and south sides of Gavilon Mesa will remain blocked.

The remainder of the site will drain to the Rio Paguate and Rio Moquino.

Modify waste dumps as previously discussed.

STRUCTURES:

Construct a cement bulkhead 680 feet below the collar of the P-10 decline, and backfill to the surface. Place a 10-foot cement surface plug in each vent hole. All other mine entries would be covered by backfilling, or have been previously plugged.

Remove crusher, tipple, and all other mining equipment.

Salvage all rail spur track, ties, and the Quirk loading dock. Remove ballast and contaminated soils to the open pits. Cover disturbed area with one foot of topsoil.

Clear the four main roads on the site, and the parking areas on Lease Number 4 of radiologically contaminated material until values of twice background are achieved. These roads and parking areas will remain. Clear all other roads, parking areas, and associated structures of radiologically contaminated material until values of twice background are achieved, and recontour these areas to conform to the surrounding terrain.

Remove all power lines.

Remove all pumps, and cap all water wells.

Clean up P-10 mine buildings and the New Shop until radiological values of twice background are achieved. Leave these buildings and sewage systems intact. Remove all other buildings including the employee housing, Jackpile Shop, Open Pit Offices, and powder magazines.

REVEGETATION:

Obtain topsoil from the four existing topsoil stockpiles and from a

topsoil borrow area along the Rio Moquino. Place one foot of topsoil on all backfill material and waste dumps.

Revegetate all disturbed areas to approximately the species density and diversity of the surrounding undisturbed land. Revegetate with predominantly native grasses and shrubs that are conducive to the grazing of livestock.

Prevent grazing for three years following reclamation.

MONITORING:

Continue monitoring (by Anaconda) of surface water, groundwater, air quality, subsidence, revegetation success, concentration of toxic elements in revegetation species for a period of three years following the completion of reclamation activities.

The Minerals Management Service and the Bureau of Indian Affairs would monitor every aspect of the reclamation activities, to assure compliance with all reclamation requirements. The Pueblo of Laguna and the Bureau of Indian Affairs would control future land use on the site, and would prevent any uses not provided for by this reclamation alternative.

ANACONDA Minerals Company
555 Seventeenth Street
Denver, Colorado 80202
Telephone 303 575 4000

June 9, 1982

Mr. Marc E. Nelson
Task Force Leader
United States Department of the Interior
Minerals Management Service
P.O. Box 26124
Albuquerque, New Mexico 87125

Dear Mr. Nelson:

In response to your letter of May 21, 1982, Anaconda Minerals Company has reviewed the MMS summary statement of the Jackpile-Paguate Reclamation Plan. Attached, please find an itemized review and, where appropriate, recommended language changes to more closely reflect the intent of the Anaconda Plan.

If additional information or clarification is required, please advise.

W. E. Gray, Chairman
Anaconda EIS Team

WEG/cc

ALTERNATIVE C-1 - GRAZING USE (APPLICANT'S PROPOSAL)

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|---|---|
| OBJECTIVES: | Mitigate the effects of mining disturbance on the leased lands. |
| ANACONDA RESPONSE: | Okay. |
| | Mitigate safety and health hazards. |
| ANACONDA RESPONSE: | Okay. |
| | Protect the environment with particular concern for the water resources. |
| ANACONDA REPONSE: | Okay. |
| | Enhance the visual resources of the area. |
| ANACONDA RESPONSE: | Okay. |
| FUTURE LAND USES: | Livestock grazing. |
| ANACONDA RESPONSE: | Okay. |
| | Specifically exluded are habitation, farming, and construction of commercial or industrial facilities. |
| ANACONDA RESPONSE: | Anaconda recommends that no commercial/industrial buildings be constructed on areas within the mine lease boundary where geological integrity of the ground has been disturbed. |

RECLAMATION MEASURES:

(Open Pits) Backfill to three feet above the groundwater recovery level (as determined by Anaconda).

ANACONDA RESPONSE: Okay.

Backfill, with protore, waste dumps H and J, and excess material obtained from the sloping of waste piles.

ANACONDA RESPONSE: Okay, but backfill material will also include some material moved to clear stream channels.

Cover the backfill material with four feet of non-hazardous waste, and one foot of topsoil.

ANACONDA RESPONSE: The term "non-hazardous waste" should be changed to "overburden material."

Buttress the west side of Gavilan Mesa highwall (the top of the highwall may be cut back by blasting).

ANACONDA RESPONSE: Buttress comment is okay but the highwall may be modified by blasting and/or hauling.

Fence the north, west and south sides of the North and South Paguate Pits with six-foot chainlink.

ANACONDA RESPONSE: The fencing is proposed in the vicinity of Paguate Village. This includes the west end of both the North and South Paguate Pits and extends to portions of the North and South sides of the pit area.

Scale all other highwalls.

ANACONDA RESPONSE: Okay.

(Protore Stockpiles) Use all protore as backfill material.

ANACONDA RESPONSE: Okay.

(Waste Piles) Relocate dumps H and J to the open pits as backfill material.

ANACONDA RESPONSE: Okay.

Cover dumps that contain hazardous material or their outer surface with four feet of non-hazardous material and one foot of topsoil.

ANACONDA RESPONSE: The term "hazardous material" should be changed to "Jackpile Sandstone" and "non-hazardous material" should be changed to "overburden."

Cover dumps that do not contain hazardous material on their outer surface with one foot of topsoil.

ANACONDA RESPONSE: The term "hazardous material" should be changed to "Jackpile Sandstone."

Leave previously topsoiled and revegetated dumps undisturbed (except to reseed, as necessary).

ANACONDA RESPONSE: Some of the dumps previously topsoiled and revegetated will have slopes modified for stabilization.

Reduce the angle of some dump slopes. The approximate average grade would be 2.25 to 1 with terraces and rock-lined drop structures to drain surface runoff off the piles.

ANACONDA RESPONSE: The angle will be reduced on most slopes and the grade will run from 3:1 to 2:1.

(Site Stability and Drainage) Remove all waste that lies within 200 feet of the Rio Moquino and Rio Paguate.

ANACONDA RESPONSE: Okay, but we have an overburden pile that sits within 200' of the Rio Paguate which we have proposed to leave in place as it does not contain Jackpile Sandstone waste material.

Armor arroyo headcuts that have the potential for encroaching upon waste dumps.

ANACONDA RESPONSE: Okay, except change "waste dumps" to "Jackpile Sandstone waste dumps."

(Site Stability & Drainage) Continued

Construct a series of micro-basins within each open pit (approximately three per pit).

ANACONDA RESPONSE:

Anaconda has no intention of creating "micro-basins" in pits. The pit bottoms will be constructed to meet stability and ground water elevation criteria. The surface of the pits will have water spreading berms to control water runoff and to provide effective water harvest. This should not be interpreted as an intent to construct micro basins.

Construct erosion control berms on the perimeter of all waste piles. Construct a series of erosion control berms on the top of all waste piles to hold surface runoff.

ANACONDA RESPONSE:

Anaconda proposes to construct water spreading berms on the top of dumps to spread the storm water and control runoff. The term "waste piles" should be changed to "dumps." The berms on the tops of the dumps are to control runoff--not to hold surface water.

Remove waste dump J, and protore stockpiles 17-BC and 6-B to unlock the ephemeral drainage on the south side of the mine. The two blocked drainages on the north and south sides of Gavilan Mesa will remain blocked.

ANACONDA RESPONSE:

Okay.

The remainder of the site will drain to the Rio Paguate and Rio Moquino.

ANACONDA RESPONSE:

The pit areas do not have drainage to the Rio Paguate or Rio Moquino for the projected runoff.

Modify waste dumps as previously discussed.

ANACONDA RESPONSE:

Okay, but change "waste dumps" to "dumps."

(Structures)

Construct a cement bulkhead 680 feet below the collar of the P-10 decline, and backfill to the surface. Place a 10-foot cement surface plug in each vent hole. All other mine entries would be covered by backfilling, or have been previously plugged.

ANACONDA RESPONSE:

The Alpine Mine entrances will also receive bulkheads before final backfill.

(Structures) Continued — Remove crusher, tipple, and all other mining equipment.

ANACONDA RESPONSE: Okay, however, the crusher in P-10, which is underground, may be left in place.

Salvage all rail spur track, ties, and the Quirk loading dock. Remove ballast and contaminated soils to the open pits. Cover disturbed area with one foot of topsoil.

ANACONDA RESPONSE: Anaconda proposes to remove all spilled ore and ballast from the railroad spur and Quirk loading dock area. The right-of-way will be graded and seeded. One foot of topsoil will not be needed.

Clear the four main roads on the site, and the parking areas on Lease Number 4 of radiologically contaminated material until values of twice the background are achieved. These roads and parking areas will remain. Clear all other roads, parking areas, and associated structures of radiologically contaminated material until values of twice background are achieved, and recontour these areas to conform to the surrounding terrain.

ANACONDA RESPONSE: The term "radiologically contaminated materials" should be changed to "Jackpile Sandstone mineral material."

Remove all power lines.

ANACONDA RESPONSE: We propose to leave power lines on lease #4 and those lines serving areas exterior to the mine lease area.

Remove all pumps, and cap all water wells.

ANACONDA RESPONSE: Okay.

Clean up P-10 mine buildings and the New Shop until radiological values of twice background are achieved. Leave these buildings and sewage systems intact. Remove all other buildings including the employee housing, Jackpile Shop, Open Pit Offices, and powder magazines.

ANACONDA RESPONSE: Okay, but leave all buildings on lease #4, all others to be removed.

(Revegetation) Obtain topsoil from the four existing topsoil stockpiles and from a topsoil borrow area along the Rio Moquino. Place one foot of topsoil on all backfill material and waste dumps.

ANACONDA RESPONSE: Okay, but change "waste dumps" to "Jackpile Sandstone waste dumps." ???

Revegetate all disturbed areas to approximately the species density and diversity of the surrounding undisturbed land. Revegetate with predominantly native grasses and shrubs that are conducive to the grazing of livestock.

ANACONDA RESPONSE: Okay.

Prevent grazing for three years following reclamation.

ANACONDA RESPONSE: The word "reclamation" should be changed to "revegetation."

MONITORING: Continue monitoring (by Anaconda) of surface water, groundwater, air quality, subsidence, revegetation success, concentration of toxic elements in revegetation species for a period of three years following the completion of reclamation activities.

ANACONDA RESPONSE: Anaconda proposes to continue monitoring for a period up to three years after the completion of revegetation.

The Minerals Management Service and the Bureau of Indian Affairs would monitor every aspect of the reclamation activities, to assure compliance with all reclamation requirements. The Pueblo of Laguna and the Bureau of Indian Affairs would control future land use on the site, and would prevent any uses not provided for by this reclamation alternative.

ANACONDA RESPONSE: This reference to activities of groups or agencies other than Anaconda is not provided for in the Anaconda Reclamation Plan.